

BRUHATH BENGALORE MAHANAGARA PALIKE

Executive Engineer, Yelahanka Division

Name of Work: Improvements to Roads, drains and other developmental works in ward No-03 & 04. Under road development head in Chief Minister Nava Nagarothan Grants of Yalahanka division. (Package - 04)

Name of Agency: Sri. B B Umesh (M/s SMLP Asphalts)

Bar Chart

Sl.No	Description of work	BOQ	Quantity Completed	% Completed	Progress Chart				
					20%	40%	60%	80%	100%
1	KSRRB 200-8. Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means of light jungle, removal of stumps, disposal unserviceable materials, stacking of serviceable materials, labour charges complete as per specifications MORTH Chapter-2	15.00	15.00	100.00%					
2	KSRRB M300-49. Scarifying bituminous course 50mm to 75mm thick along the premix carpet surface dressing by manual means without disturbing the base and stacking of the debris materials including the cost of all labour charges complete as per specification. MORTH / Chapter 3	1135.00	859.13	75.69%					
3	KSRRB M300-49. Scarifying stone metal crust 50mm to 100mm thick with pick axes along the premix carpet/surface dressing and stacking of old seerviceable materials by manuals means including cost of all labour charges complete as per specification. MORTH / Chapter 3	1339.00	859.13	64.16%					
4	Ksrrb M300-59.2. Loosening, Levelling And Compacting Orignal Ground Supporting Embankment To Facilitate Placement Of First Layer Of Embankment, Scarified To A Depth Of 150mm, Mixed With Water At Omc And Then Compacted By Rolling So As To Achieve Minimum Dry Density As Given In Table 300-2 For Embankment Construction. Complete As Per Specifications. Case-Ii Compacting Original Ground Supporting	5274.09	2413.24	45.76%					
5	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting loading and with cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301	633.35	466.24	73.61%					



6	KSRRB M300-19. Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications. MORTH Specification No. 301	570.01	411.93	72.27%				
7	Construction of granular sub-base Grading-V as sub-base and drainage layer by providing Coarse graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve 98% proctor density, complete as per specification. Clause 4010 of MORTH V Revision.	188.46	128.87	68.38%				
8	KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired surface and compacting with	1318.81	1306.24	99.05%				
9	KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Specification clause 501.	121380.59	33290.86	27.43%				
10	KSRRB M500-6. Providing and applying primer coat with S.S bitumen emulsion on prepared surface of granular base such as WMM including of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. Clause 502 of MORTH V	6107.12	6107.12	100.00%				
11	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5.	125823.37	51742.67	41.12%				



12	SRRB 500-17 Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision 21.17.6	770.76	490.92	63.69%				
13	21.78.12 Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laing with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of	4995.43	1676.97	33.57%				
14	Construction of Dry Lean Cement Concrete mix CC 1:5:10 with OPC cement @160kgs with 25mm and down size graded granite metal coarse aggregate @ 0.86 cum and fine aggregate@0.58cum sub base over a prepared sub-grade with (coarse and fine aggregate confirming to IS383)aggregate cement ratio not to exceed 15:1aggregate gradation after blending to be as per table 600-1 cement	248.60	233.12	93.77%				
15	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46um,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts, conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved	607.05	233.12	38.40%				
16	KSRRB M800-35. Supply and Installation of Moulded Shank /raised Pavement Markers made of polycarbonate and ABS (Acrylonitrile Butadiene Styrene) moulded body and reflective pane;s with micro prismatic lens capable of providing tital internal reflection of the light enerting the lens face and shall support a load of 16000 kg tested in accorande to Specifications of Categrory A of MORTH Circular No RW/NH/33023/10-97-DO III Dt 11.06 1997	1163.00	1163.00	100.00%				
17	KSRRB M800-13. Road Marking with Hot Applied Thermoplastic Compound Reflectrising Glass Beads on Bituminous Surface / Concrete Surface :Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standars specified.The finished surface to be level, uniform and	6630.12	2538.05	38.28%				



18	KSRB 15-19.1 : Providing and applying ready mix priming coat over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications	3320.21	0.00	0.00%				
19	KSRB 15-19.1 : Providing and applying spray painting (excluding prime coat) over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications	3320.21	0.00	0.00%				
20	Supply and fixing of Retro Reflective Single Arrow Road Name Signboard of size 1600mm x 900mm made out of retro reflective sheeting conforming to Type XI standards of ASTM D 4956 - 09 & as per IRC 67-2012 for full back ground of blue colour & white letters and fixed over 4 mm thick Aluminium Composite Material sheet having minimum 0.5 mm thick Aluminium skin on both sides with back side painted grey colour and fixed over back	164.16	0.00	0.00%				
21	Supply and fixing Medium duty SFRC Frame and cover confirming to IS:12592:(Part-I)-1988 and IS12592: Part(II)-1991 with latest amendment , including cutting slabs to the required size for the opening and fixing the cover in CC 1:2:4 and C.M. 1:3 plastering 20mm thick to all exposed faces, curing for 10days with all lead and lift etc., complete.-Do heavy duty	177.00	0.00	0.00%				
22	Providing laying plain/ reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43cum machine mixed, well compacted for walls and bottom including centring, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200.	7.50	7.50	100.00%				
23	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregates / Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications. MORTH -100/ Chapter 1	4912.74	1138.37	23.17%				



24	KSRRB M100-4.1. Cost of Haulage Excluding Loading and Unloading MORTH -100/ Chapter 1 Case-I : Surface Road	77581.69	17758.50	22.89%					
25	KSRRB M2900- PCC 1:3:6 in Foundation KSRRB M2900 1. Plain cement concrete M10 mix with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing complete as per specifications MORTH Specification No. 408	121.06	121.05	99.99%					
26	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc., complete	13450.58	9043.00	67.23%					
27	Removing and resetting of kerb stones.	5865.99	2786.10	47.50%					
28	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8	3162.20	2756.84	87.18%					
29	KSRRB M300-59.2. Loosening, levelling and compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment construction. complete as per specifications. Case-II: Compacting original ground supporting	4503.00	303.60	6.74%					
30	KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve	900.60	894.84	99.36%					



31	KSRB 14.6-1. Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final	4503.00	288.00	6.40%					
32	KSRB 14.6-2 :Providing and laying heavy duty cobble stones 75mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final	434.00	0.00	0.00%					
33	Dismantling/Removing and resetting of footpath slab,disposal unserviceable materials,stacking of serviceable materials,labour charges complete as per specifications as directed by the Engineer,with all lead and lift etc. complete as per specifications	25221.65	7845.19	31.10%					
34	KSRRB 300-1 Earthwork excavation by manual means for roads,drains and similar works in ordinary soil , excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3	6532.67	6438.04	98.55%					
35	KSRRB M2900- PCC 1:3:6 in Foundation KSRRB M2900 1. Plain cement concrete M10 mix with crushed stone aggregate 40 m nominal size mechanically mixed, placed in foundation and compacted by vibration including curing complete as per specifications MORTH Specification No. 408	145.36	90.44	62.22%					
36	KSRRB M2200-6. Supplying, fitting and placing TMT bar reinforcement for RCC work including straightening, cutting, bending, hooking, placing in position ,lapping/welding wherever required tying with bending wire and anchoring to the adjoining members wherever necessary complete as per design(laps, hooks and wastage shall not be measured and paid) cost of materials , labour, HOM complete as per	10.09	10.09	100.00%					
37	Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.43cum, machine mixed well compacted for walls and bottom including centering,shuttering cost of materials, HOM of machinery, curing ets., complete excluding cost of steel as per MORTH specifications, No 1500,1700,2200,	487.37	364.26	74.74%					



38	Removing B.S slab of drain and stacking	1824.90	0.00	0.00%				
39	Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate enclosed)	9140.66	5278.92	57.75%				
40	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)	415.26	63.96	15.40%				
41	Removing and Refixing stone slabs of drain and pointing in C.M(1:3)	7248.98	2256.67	31.13%				
42	KSRRB M200-15.1. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. iii) Dismantling Stone Masonry A. Rubble Stone masonry in	174.39	0.00	0.00%				
43	KSRRB M200-26. Dismantling Kerb stone by manual means and disposal of dismantled materials with all lifts and complete as per specifications. MORTH Specification No. 202	8054.71	4087.30	50.74%				
44	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials separately complete as per specifications. MORTH Specification No. 202	804.14	466.24	57.98%				
45	KSRRB 300-1. Earthwork excavation by manual means for roads, drains and similar works in ordinary soil excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3	35.92	0.00	0.00%				



